WindBOX Series

MS-9A25 Fanless Box PC

G52-9A251X1

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U.S. Patent Numbers

4,631,603; 4,819,098; 4,907,093; 5,315,448; and 6,516,132.

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Revision History

Revision	Revision History	Date
V1.0	First release	July 2009

Upgrade and Warranty

Please be noticed that the memory, hard disk drive and optical disk drive pre-installed in the product users purchased may be upgradable or replaceable by user's request. To learn more about upgrade limitation, please refer to the specification in the User's Manual. For any further information about the product users purchased, please contact the local dealer. Do not attempt to upgrade or replace any component of the product, if you are not an authorized dealer or service center, since it may cause the warranty void. It is strongly recommended that you contact the authorized dealer or service center for any upgrade or replace service.

Technical Support

If a problem arises with your system and no solution can be obtained from the user's manual, please contact your place of purchase or local distributor. Alternatively, please try the following help resources for further guidance.

- Visit the MSI website for FAQ, technical guide, BIOS updates, driver updates and other information via http://www.msi.com/index.php?func=service
- Contact our technical staff via http://ocss.msi.com/

Free DOS Notice

FreeDos Version 3.7.8

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For any question about the use and license of the freeDOS software please visit http://www.freedos.org.

Safety Instructions

- Always read the safety instructions carefully.
- Keep this User's Manual for future reference.
- Keep this equipment away from humidity.
- Lay this equipment on a reliable flat surface before setting it up.
- The openings on the enclosure are for air convection hence protects the equipment from overheating. DO NOT COVER THE OPENINGS.
- Make sure that the power voltage is within its safety range and has beenadjusted properly to the value of 100~240V before connecting the equipmentto the power inlet.
- Place the power cord in a way that people can not step on it. Do not place anything over the power cord.
- Always Unplug the Power Cord before inserting any add-on card or module.
- All cautions and warnings on the equipment should be noted.
- Never pour any liquid into the opening that could damage or cause electrical shock.
- If any of the following situations arises, get the equipment checked by service personnel:
  - The power cord or plug is damaged.
  - Liquid has penetrated into the equipment.
  - The equipment has been exposed to moisture.
  - The equipment does not work well or you can not get it work according to User's Manual.
  - The equipment has dropped and damaged.
  - The equipment has obvious sign of breakage.

  DO NOT LEAVE THIS EQUIPMENT IN AN ENVIRONMENT UNCONDITIONED, STORAGE TEMPERATURE ABOVE 40°C (102°F). IT MAY DAMAGE THE EQUIPMENT.

CAUTION: Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer.

廢電池請回收
For better environmental protection, waste batteries should be collected separately for recycleing special disposal.

1. The optical storage devices are classified as CLASS 1 LASER PRODUCT. Use of controls or adjustments or performance of procedures other than those specified is prohibited.
2. Do not touch the lens inside the drive.

FCC-B Radio Frequency Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the measures listed below.

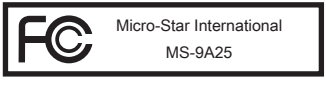
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Notice 1

The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Notice 2

Shielded interface cables and A.C. power cord, if any, must be used in order to comply with the emission limits.



OIR LA NOTICE D'INSTALLATION AVANT DE RACCORDER AU RESEAU.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1) this device may not cause harmful interference, and
2) this device must accept any interference received, including interference that may cause undesired operation.

WEEE (Waste Electrical and Electronic Equipment) Statement

ENGLISH

To protect the global environment and as an environmentalist, MSI must remind you that...

Under the European Union ("EU") Directive on Waste Electrical and Electronic Equipment, Directive 2002/96/EC, which takes effect on August 13, 2005, products of "electrical and electronic equipment" cannot be discarded as municipal waste anymore and manufacturers of covered electronic equipment will be obligated to take back such products at the end of their useful life. MSI will comply with the product take back requirements at the end of life of MSI-branded products that are sold into the EU. You can return these products to local collection points.

DEUTSCH

Hinweis von MSI zur Erhaltung und Schutz unserer Umwelt

Gemäß der Richtlinie 2002/96/EG über Elektro- und Elektronik-Altgeräte dürfen Elektro- und Elektronik-Altgeräte nicht mehr als kommunale Abfälle entsorgt werden. MSI hat europaweit verschiedene Sammel- und Recyclingunternehmen beauftragt, die in die Europäische Union in Verkehr gebrachten Produkte, am Ende seines Lebenszyklus zurückzunehmen. Bitte entsorgen Sie dieses Produkt zum gegebenen Zeitpunkt ausschliesslich an einer lokalen Altgerätesammelstelle in Ihrer Nähe.

FRANÇAIS

En tant qu'écologiste et afin de protéger l'environnement, MSI tient à rappeler ceci...

Au sujet de la directive européenne (EU) relative aux déchets des équipement électriques et électroniques, directive 2002/96/EC, prenant effet le 13 août 2005, que les produits électriques et électroniques ne peuvent être déposés dans les décharges ou tout simplement mis à la poubelle. Les fabricants de ces équipements seront obligés de récupérer certains produits en fin de vie. MSI prendra en compte cette exigence relative au retour des produits en fin de vie au sein de la communauté européenne. Par conséquent vous pouvez retourner localement ces matériels dans les points de collecte.

РУССКИЙ

Компания MSI предпринимает активные действия по защите окружающей среды, поэтому напоминаем вам, что....

В соответствии с директивой Европейского Союза (ЕС) по предотвращению загрязнения окружающей среды использованным электрическим и электронным оборудованием (директива WEEE 2002/96/EC), вступающей в силу 13 августа 2005 года, изделия, относящиеся к электрическому и электронному оборудованию, не могут рассматриваться как бытовой мусор, поэтому производители вышеперечисленного электронного оборудования обязаны принимать его для переработки по окончании срока службы. MSI обязуется соблюдать требования по приему продукции, проданной под маркой MSI на территории ЕС, в переработку по окончании срока службы. Вы можете вернуть эти изделия в специализированные пункты приема.

ESPAÑOL

MSI como empresa comprometida con la protección del medio ambiente, recomienda:

Bajo la directiva 2002/96/EC de la Unión Europea en materia de desechos y/o equipos electrónicos, con fecha de rigor desde el 13 de agosto de 2005, los productos clasificados como "eléctricos y equipos electrónicos" no pueden ser depositados en los contenedores habituales de su municipio, los fabricantes de equipos electrónicos, están obligados a hacerse cargo de dichos productos al termino de su período de vida. MSI estará comprometido con los términos de recogida de sus productos vendidos en la Unión Europea al final de su periodo de vida. Usted debe depositar estos productos en el punto limpio establecido por el ayuntamiento de su localidad o entregar a una empresa autorizada para la recogida de estos residuos.

NEDERLANDS

Om het milieu te beschermen, wil MSI u eraan herinneren dat….

De richtlijn van de Europese Unie (EU) met betrekking tot Vervuiling van Electrische en Electronische producten (2002/96/EC), die op 13 Augustus 2005 in zal gaan kunnen niet meer beschouwd worden als vervuiling. Fabrikanten van dit soort producten worden verplicht om producten retour te nemen aan het eind van hun levenscyclus. MSI zal overeenkomstig de richtlijn handelen voor de producten die de merknaam MSI dragen en verkocht zijn in de EU. Deze goederen kunnen geretourneerd worden op lokale inzamelingspunten.

SRPSKI

Da bi zaštitili prirodnu sredinu, i kao preduzeće koje vodi računa o okolini i prirodnoj sredini, MSI mora da vas podesti da…

Po Direktivi Evropske unije ("EU") o odbačenoj ekektronskoj i električnoj opremi, Direktiva 2002/96/EC, koja stupa na snagu od 13. Avgusta 2005, proizvodi koji spadaju pod "elektronsku i električnu opremu" ne mogu više biti odbačeni kao običan otpad i proizvođači ove opreme biće prinuđeni da uzmu natrag ove proizvode na kraju njihovog uobičajenog veka trajanja. MSI će poštovati zahtev o preuzimanju ovakvih proizvoda kojima je istekao vek trajanja, koji imaju MSI oznaku i koji su prodati u EU. Ove proizvode možete vratiti na lokalnim mestima za prikupljanje.

POLSKI

Aby chronić nasze środowisko naturalne oraz jako firma dbająca o ekologię, MSI przypomina, że...

Zgodnie z Dyrektywą Unii Europejskiej ("UE") dotyczącą odpadów produktów elektrycznych i elektronicznych (Dyrektywa 2002/96/EC), która wchodzi w życie 13 sierpnia 2005, tzw. "produkty oraz wyposażenie elektryczne i elektroniczne " nie mogą być traktowane jako śmieci komunalne, tak więc producenci tych produktów będą zobowiązani do odbierania ich w momencie gdy produkt jest wycofywany z użycia. MSI wypełni wymagania UE, przyjmując produkty (sprzedawane na terenie Unii Europejskiej) wycofywane z użycia. Produkty MSI będzie można zwracać w wyznaczonych punktach zbiorczych.

TÜRKÇE

Çevreci özelliğiyle bilinen MSI dünyada çevreyi korumak için hatırlatır:

Avrupa Birliği (AB) Kararnamesi Elektrik ve Elektronik Malzeme Atığı, 2002/96/EC Kararnamesi altında 13 Ağustos 2005 tarihinden itibaren geçerli olmak üzere, elektrikli ve elektronik malzemeler diğer atıklar gibi çöpe atılamayacak ve bu elektonik cihazların üreticileri, cihazların kullanım süreleri bittikten sonra ürünleri geri toplamakla yükümlü olacaktır. Avrupa Birliği'ne satılan MSI markalı ürünlerin kullanım süreleri bittiğinde MSI ürünlerin geri alınması isteği ile işbirliği içerisinde olacaktır. Ürünlerinizi yerel toplama noktalarına bırakabilirsiniz.

ČESKY

Záleží nám na ochraně životního prostředí - společnost MSI upozorňuje...

Podle směrnice Evropské unie ("EU") o likvidaci elektrických a elektronických výrobků 2002/96/EC platné od 13. srpna 2005 je zakázáno likvidovat "elektrické a elektronické výrobky" v běžném komunálním odpadu a výrobci elektronických výrobků, na které se tato směrnice vztahuje, budou povinni odebírat takové výrobky zpět po skončení jejich životnosti. Společnost MSI splní požadavky na odebírání výrobků značky MSI, prodávaných v zemích EU, po skončení jejich životnosti. Tyto výrobky můžete odevzdat v místních sběrnách.

MAGYAR

Annak érdekében, hogy környezetünket megvédjük, illetve környezetvédőként fellépve az MSI emlékezteti Önt, hogy ...

Az Európai Unió („EU") 2005. augusztus 13-án hatályba lépő, az elektromos és elektronikus berendezések hulladékairól szóló 2002/96/EK irányelve szerint az elektromos és elektronikus berendezések többé nem kezelhetőek lakossági hulladékként, és az ilyen elektronikus berendezések gyártói kötelessé válnak az ilyen termékek visszavételére azok hasznos élettartama végén. Az MSI betartja a termékvisszavétellel kapcsolatos követelményeket az MSI márkanév alatt az EU-n belül értékesített termékek esetében, azok élettartamának végén. Az ilyen termékeket a legközelebbi gyűjtőhelyre viheti.

ITALIANO

Per proteggere l'ambiente, MSI, da sempre amica della natura, ti ricorda che….

In base alla Direttiva dell'Unione Europea (EU) sullo Smaltimento dei Materiali Elettrici ed Elettronici, Direttiva 2002/96/EC in vigore dal 13 Agosto 2005, prodotti appartenenti alla categoria dei Materiali Elettrici ed Elettronici non possono più essere eliminati come rifiuti municipali: i produttori di detti materiali saranno obbligati a ritirare ogni prodotto alla fine del suo ciclo di vita. MSI si adeguerà a tale Direttiva ritirando tutti i prodotti marchiati MSI che sono stati venduti all'interno dell'Unione Europea alla fine del loro ciclo di vita. È possibile portare i prodotti nel più vicino punto di raccolta.

TABLE OF CONTENTS

Copyright Notice ..... **ii**
Trademarks ..... **ii**
U.S. Patent Numbers ..... **ii**
Revision History ..... **ii**
Upgrade and Warranty ..... **iii**
Technical Support ..... **iii**
Free DOS Notice ..... **iii**
Safety Instructions ..... **iv**
FCC-B Radio Frequency Interference Statement ..... **v**
WEEE (Waste Electrical and Electronic Equipment) Statement ..... **vi**
Chapter 1 Overview **1-1**
Packing Contents 1-2
System Overview 1-3
System Specifications 1-5
Chapter 2 System Setup **2-1**
Installation Tools 2-2
System Setup 2-3

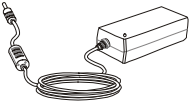
Chapter 1
Overview

Thank you for choosing the WindBOX, an excellent industrial computer system from MSI.

The WindBOX eliminates the noise and the risk of fan's failure by wide heatsink as fanless solution. Furthermore, it supports VESA wall-mount interface for various scenarios like digital signage, thin client, and POS with affordable expenditure, which not only meets the demand of Industrial applications but also fulfills the needs of companies, governments, and institutes for general application.

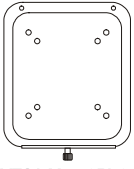
PACKING CONTENTS

MS-9A25 System



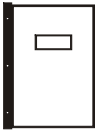
Power Adapter

Power Cord



VESA Mount Plate

Wireless LAN Antenna



User's Manual

Driver/Utility Disk

- Please contact us immediately if any of the item is damaged or missing.
- The picture is for your reference only and your packing contents may slightly vary depending on the model you purchased.

System Overview

Right Side View

Left Side View

1	**Gigabit LAN Jack (Optional)** The standard RJ-45 LAN jack is for connection to the Local Area Network (LAN). You can connect a network cable to it.
2	**Gigabit LAN Jack** The standard RJ-45 LAN jack is for connection to the Local Area Network (LAN). You can connect a network cable to it.
3	**Headphone Jack (Green)** - This connector is provided for headphones or speakers.
4	**Microphone Jack (Pink)** - This connector is provided for microphones.
5 9	**USB Ports** The USB (Universal Serial Bus) port is for attaching USB devices such as keyboard, mouse, or other USB-compatible devices.

6	**DVI Port** The DVI (Digital Visual Interface) connector allows you to connect an LCD monitor. It provides a high-speed digital interconnection between the computer and its display device. To connect an LCD monitor, simply plug your monitor cable into the DVI connector, and make sure that the other end of the cable is properly connected to your monitor (refer to your monitor manual for more information.)
7	**Antenna Connector** This connector allows you to connect an external antenna for wireless LAN.
8	**Antenna Connector (Optional)** This connector allows you to connect an external antenna for wireless LAN.
10	**Power Button** Press this button to turn the system on or off.
11	**Serial Port** The serial port is a 16550A high speed communications port that sends/ receives 16 bytes FIFOs. You can attach a serial mouse or other serial devices directly to the connector.
12	**Power Jack** The power adapter converts AC power to DC power for this jack. Power supplied through this jack supplies power to the system. To prevent damage to the system, always use the supplied power adapter.

System Specifications

Processor

- Intel ATOM N270 1.6GHz

FSB

- 533MHz

Chipset

- North Bridge: Intel 945GSE chipset
- South Bridge: Intel ICH7M chipset

Memory

- Single channel DDR2 533/667 MHz SO-DIMM, up to 2GB

LAN

- Gigabit Fast Ethernet by Intel 82574 GbE controller

Video

- Intel GMA950 graphic engine
- Up to QXGA (2048 x 1536) resolution

Audio

- HDA Codec by Realtek ALC888 7.1 channel
- Compliant with Azalia 1.0 specs

Input / Output (I/O)

- Left Panel I/O
  - 1 wireless LAN antenna connector (optional)
  - 3 USB ports
  - 1 power button
  - 1 RS-232/422/485 serial port
  - 1 DC power jack
- Right Panel I/O
  - 2 Gigabit LAN jacks (optional)
  - 1 headphone/speaker jack (green)
  - 1 microphone jack (pink)
  - 1 USB port
  - 1 DVI-I port
  - 1 wireless LAN antenna connector

Power Supply

- 40 watt power adapter with active PFC
- Input: 100-240V~, 50-60Hz, 1.7A
- Output: 20V ⎓ 2.0A

Dimension & Weight

- 260 mm (W) X 180 mm (D) X 19 mm (H)
- 1.08 Kg

Regulatory Compliance

- FCC Class B, CE, C-Tick, BSMI, VCCI, RoHS compliance

Environmental

- Operating Temperature: -10°C to 60°C
- Storage Temperature: -20°C to 80°C
- Humidity: 5% ~ 90% (non condensing)

Chapter 2
System Setup

This chapter provides you with the information on hardware setup procedures. While doing the installation, be careful in holding the components and follow the installation procedures. For some components, if you install in the wrong orientation, the components will not work properly.

Use a grounded wrist strap before handling computer components. Static electricity may damage the components.

Important

- *Always unplug the power cord before installing any components.*
- *When the operating temperature reaches 40°C or higher, please replace your HDD with SSD (Solid-State Drive) or other types of heat-resistant HDD to protect your HDD from being damaged by high temperature.*

INSTALLATION TOOLS

	A Phillips (crosshead) screwdriver and a flathead screwdriver, can be used to do most of the installation. Choose one with a magnetic head would be better.
	Pliers, can be used as an auxiliary tool to connect some connectors or cables.
	Forceps, can be used to pick up tiny screws or set up the jumpers.
	Rubber gloves, can prevent yourself from being incised and suffering the static charge.

System Setup

Step 1:

Locate the VESA mount screw holes on the back of the LCD monitor.

Step 2:

Fasten the VESA mount plate to the monitor with the supplied screws.

Step 3:

Mount the system onto the VESA mount plate.

Step 4:

Tighten the thumbscrew at the bottom of the VESA mount plate to secure the system.

Step 5:

Locate the wireless LAN antenna connector and install the antenna.

Step 6:

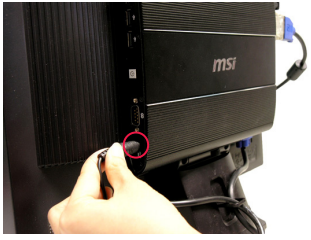
Locate the signal cable of the monitor and connect one end of the cable to the DVI port of the system. You may need to get an adapter if the supplied signal cable isn't DVI-interfaced.

Step 7:

Connect the other end of the signal cable to the monitor. Connect the monitor power cord to the monitor and to the power source.

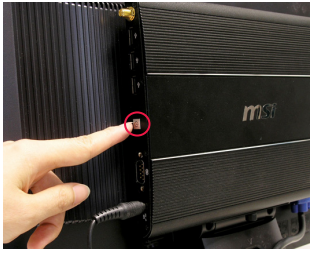
Step 8:

Assemble the system power adapter and the power cord. Connect the power adapter to the system and then connect the power cord to the power source.



Important

We suggest that you connect the power adapter to your system first and then connect the power cord to the socket-outlet for safety concerns.

Step 9:

Turn on the system and enjoy it.